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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,339	12/15/2003	Rajesh K. Saini	2001-IP-005484U1P1	3700
71/407 7590 07/02/2008 ROBERT A. KENT P.O. BOX 1431 DUNCAN, OK 73536				
EXAMINER TSOY, ELENA				
ART UNIT 1792		PAPER NUMBER		
NOTIFICATION DATE 07/02/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/736,339

**Applicant(s)**

SAINI ET AL.

**Examiner**

Elena Tsoy

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 2/4/08; 2/6/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

Amendment filed on April 17, 2008 has been entered. Claims 7-19 are pending in the application.

***Specification***

1. The disclosure is objected to because of the following informalities: a phrase "*polyesters; poly(orthoesters); aliphatic polyesters*" in P20 of the specification as originally filed seems to be incorrect because aliphatic polyesters are also polyesters. It is recommended to change the phrase to "polyesters such as aliphatic polyesters; poly(orthoesters)" Appropriate correction is required.

Applicants disagree with this objection because, "[t]he fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness," MPEP § 2144.08 II, Applicants believed it was appropriate to list both polyesters and aliphatic polyesters in the specification.

The Examiner respectfully disagrees with this argument. Note that polyesters are genus and aliphatic polyesters are subgenus of polyesters. For this reason, Applicants' arguments, "[t]he fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness," is irrelevant to the Examiners' objection.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Rejection of claims 7-19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn due to amendment.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Rejection of claims 7-19 under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted state of art (ASA) in view of Nguyen et al has been withdrawn due to amendment.

6. Rejection of claims 7-19 under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Free et al (US 3960736) has been withdrawn due to amendment.

7. Claims 7-10, 12-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Wang et al (US 6458867).

Nguyen et al discloses a method of introducing treatment chemicals and treating a subterranean formation comprising providing a fluid suspension including a mixture of particulate material such as gravel packing material (See column 8, lines 20-21) in said fluid suspension, a solution of a tackifying compound in a solvent (See column 5, lines 10-13) such as alcohol (See column 4, lines 55-56) and a treatment chemical whereby the treatment chemical is contacted by said tackifying compound and at least partially coated therewith whereby the tackifying compound retards release of said treatment chemical in said fluid suspension; and

depositing the coated particulates in the subterranean formation whereby coated treatment chemical is subsequently released within the subterranean formation (i.e. the tackifying compound is *degradable*) to treat at the portion of formation in contact therewith (See column 12, lines 33-55). The tackifying compound includes *any* compound (See column 5, lines 11-12), e.g. a **polyamide** (See column 5, lines 21-23) or polyesters, polyethers and polycarbamates, polycarbonates, styrene-butadiene lattices, natural or synthetic resins such as shellac and the like (See column 6, lines 9-14); and the treatment chemical include biocides, corrosion inhibitors, gel breakers such as oxidizers, enzymes, etc. (See column 4, lines 40-42). The tackifying compound is admixed in an amount of 0.1-3.0 % by weight of the coated particles (See Example 1; column 9, line 65 to column 10, line 5).

The Examiner takes official notice that it is a common knowledge in the art *polyester* or *polyamide* hydrolyze either through acid or base catalysis, to a carboxylic **acid** (i.e. claimed acid releasing degradable material), as evidenced by Wang et al (See column 8, line 66 to column 9, line 12). It is the Examiner's position that the *polyamides* in a coated gravel of Nguyen et al degrades a filter cake by slowly releasing acid when formed as gravel pack next to the filter cake because the method of Nguyen et al is substantially identical to that of claimed process.

As to claimed solvent of claim 12, obviously, one of ordinary skill in the art would use a conventional alcohol such as methanol and isopropanol as a solvent in Nguyen et al because Nguyen et al does not limit their teaching to particular alcohols.

As to claims 13 and 19, plasticizers were not addressed because they are optional.

8. Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Wang et al, further in view of Lee et al (US 6,817,414).

As was discussed above, Nguyen et al teaches the tackifying compound includes *any* compound that adheres to the particles and retards release of the treatment chemical. However, Nguyen et al fails to teach that the tackifying compound is *polylactide*.

Lee et al teaches that gravel having *coating* comprising chemicals that slowly hydrolyze and release an acidic by-product (See column 3, lines 6-15), e.g. lactic polymer (**claimed polylactide**)\* (See column 3, lines 20-28) can be used to degrade a filter cake (See column 2, lines 52-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used lactic polymer (claimed polylactide) as a tackifying compound in Nguyen et al with the expectation of providing the desired degradation a filter cake since Lee et al teach that chemicals that slowly hydrolyze and release an acidic by-product e.g. lactic polymer, are suitable to be used to degrade a filter cake, and Nguyen et al do not limit their teaching to particular tackifying compounds. Moreover, it is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See MPEP 2144.07.

\* The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4767628 to Hutchinson shows that polylactide is a polymer of lactic acid alone (See column 20, lines 29-33).

***Response to Arguments***

9. Applicant's arguments with respect to claims 7-19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.  
Primary Examiner  
Art Unit 1792

July 3, 2008

/Elena Tsoy /

Primary Examiner, Art Unit 1792